### Welcome

# **Scoping Meeting**

West Tennessee Solar Farm Environmental Assessment







# Purpose of tonight's meeting

- This Scoping Meeting serves as the official kickoff to the Environmental Assessment (EA) for the West Tennessee Solar Farm project.
- The EA is required under the National Environmental Policy Act (NEPA) since the project is receiving federal funding through a U.S. Department of Energy (DOE) grant.
- Through this Scoping Meeting, the State is soliciting public input to the EA process.
- What does scoping mean? It is the process of determining what subjects will be considered and evaluated in an EA.
- Public comments—both verbal and written— that are received during the scoping period will be taken into account when decisions are made about the issues to be analyzed in the EA.

# **Objectives of Moderator**

- Establish respectful and fair environment for all
- Provide public an opportunity to
  - Ask questions about
    - Proposed Solar Farm project
    - NEPA process
  - Make comments/recommendations about
    - Issues to be addressed in the EA
    - How the Project might proceed
- Facilitate the formal comment process:
  - Spoken Comments
    - Sign up at registration table and be called in order
  - Written Comments
    - Submit tonight or later





## **Agenda**

#### 1. Project Presentations

- Paul Detwiler, DOE NEPA Compliance Officer
- Ryan Gooch, TN Energy Policy Director
- Dr. Stacey Patterson, Director of Research Partnerships, UT
- Paula Flowers, Vice President, Genera Energy, LLC
- Steve Allen, TN Department of Transportation (TDOT)

#### 2. Informal Q&A

Clarification regarding presentations

#### 3. Formal Public Comments

- Written and spoken comments given equal consideration
- People called in order of sign up
- Court reporter records comments for the record





# **NEPA and State Energy Program Grants**

- As part of the American Recovery and Reinvestment Act (ARRA or the Stimulus Act), Congress appropriated \$3.1 billion for State Energy Programs (SEP), an existing grant program that helps states improve energy efficiency and increase use of renewable energy.
- Tennessee received \$62.5 million under the formula Congress used to allocate the ARRA funding.
- The Department of Energy (DOE) must approve states' energy plans and ensure that the activities they intend to pursue with those funds meet statutory requirements under NEPA, the Davis-Bacon Act, and many others.
- However, states retain significant discretion in how they spend this money, and DOE does not select projects for them.



# **NEPA and State Energy Program Grants**

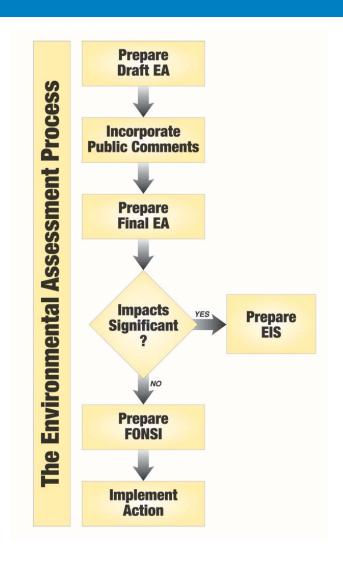
- Under NEPA, federal agencies must examine reasonable alternatives that meet their purpose and need for action.
- Here, DOE's purpose is to ensure that states spend their formula grants in ways that further the objectives of the ARRA and the statutes creating the SEP program:
  - ARRA objectives:
    - Job creation and preservation
    - Economic recovery
    - Investments in technology and infrastructure
    - Achieved quickly
  - SEP objectives:
    - Increase efficiency in order to reduce costs and consumption of energy
    - Reduce reliance on imported energy
    - Improve energy reliability
    - Reduce environmental impacts of energy use and production
- In light of these purposes, DOE's decision regarding this project would be to withhold funding for it; to provide funding without restriction; or to provide funding if Tennessee mitigates any adverse environmental impacts.

## **NEPA and State Energy Program Grants**

- NEPA allows applicants for federal grants and other actions (for example, federal permits) to prepare environmental assessments (EAs) and submit them to the federal agency.
- Here, Tennessee will prepare the environmental assessment and submit it to Department of Energy (DOE) for acceptance.
- The environmental assessment must meet all of the requirements applicable to one prepared by DOE.
- If DOE accepts the environmental assessment, it will make one of the following decisions based on it:
  - Determine that the project does not have potentially significant impacts, and issue a Finding of No Significant Impacts (FONSI), allowing the project to proceed.
  - Determine that the project would not have potentially significant impacts if certain mitigation actions were taken, and issue a FONSI with a Mitigation Action Plan (MAP).
  - Determine that the project would have potentially significant impacts that cannot be adequately mitigated, and start preparation of an environmental impact statement (EIS).
- DOE makes this decision based solely on its judgment.



### The NEPA Environmental Assessment Process



- Based on available information, DOE has determined that this project requires the preparation of an EA to comply with NEPA.
- If the EA indicates there will be no significant impacts, DOE may issue a Finding of No Significant Impact (FONSI).
- If the EA indicates the project may have significant impacts, an Environmental Impact Statement (EIS) would needed.



### The NEPA Environmental Assessment Process

- Issues for the West Tennessee Solar Farm EA:
  - Farmland Protection
  - Power Transmission
  - Visual/Noise Impacts
  - Construction Disturbance
  - Socioeconomics
  - Air Quality
  - Cultural Resources
  - Water Resources
  - Hazardous Materials and Waste
  - Cumulative Impacts within the Region

- Utilities
- Geology and Soils
- Transportation
- Environmental Justice





#### West Tennessee Solar Farm - Overview

- The Solar Farm is part of Governor Bredesen's Volunteer State Solar Initiative funded by the DOE under the State Energy Program.
- The proposed West Tennessee project includes:
  - The 5 megawatt solar array, which is the focus of this EA,
  - The adjacent Education and Welcome Center that would be developed by TDOT under separate funding.
- The State plans to contract with the University of Tennessee (UT) for the design and installation of the Farm
- UT will own and operate the Farm.





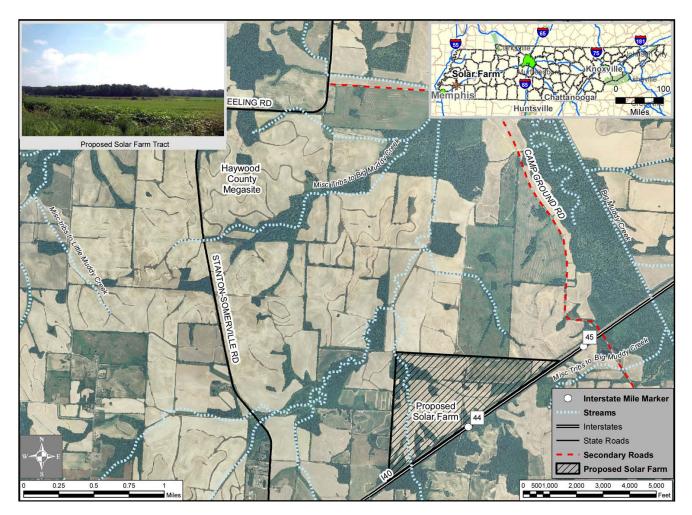
### West Tennessee Solar Farm - Overview

- The West Tennessee Solar Farm's purpose and goals include:
  - Demonstrate the zero-carbon production of electricity on a highly visible and significant scale that will create jobs,
  - Educate the public on the benefits of solar energy,
  - Reduce greenhouse gas emissions, and
  - Increase renewable energy generation.





# **Proposed Location of West Tennessee Solar Farm**







# West Tennessee Solar Farm - Project Description

- Detailed design by March 2010
- Anticipated 20+ acres of solar panels
- Approximate 5 MW Array configuration to maximize public education and power generation
- Fixed mount photovoltaic (PV) solar panels
- Demonstration of next generation technologies for solar power generation and energy storage technology





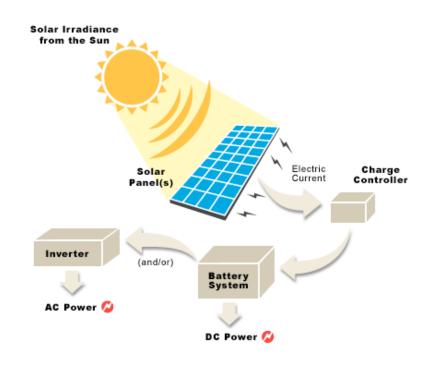
Conceptual Photograph for Discussion Purposes





# West Tennessee Solar Farm - Project Description

- 5 MW of electricity will be generated and purchased by TVA for local distribution by Chickasaw Electric Cooperative (CEC).
- Exact route for connectivity will be determined during detailed design.
- Design will seek to provide additional reliability in CEC system loading and line locations.







# **Education and Welcome Center Description: Roadway Connection & Infrastructure**

#### **Two Stage Development**

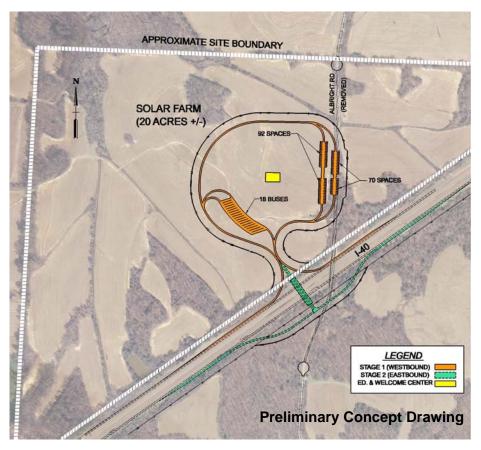
- Stage 1: access for westbound travelers plus site infrastructure. Footprint is 32 +/-acres
- Stage 2: access for eastbound travelers. This work includes a two lane bridge over I-40.
  Footprint is 2.4+/- acres

#### **Utilities**

- Traditional connections available near Exit 47
- Opportunities for sustainable design

#### **Albright Road**

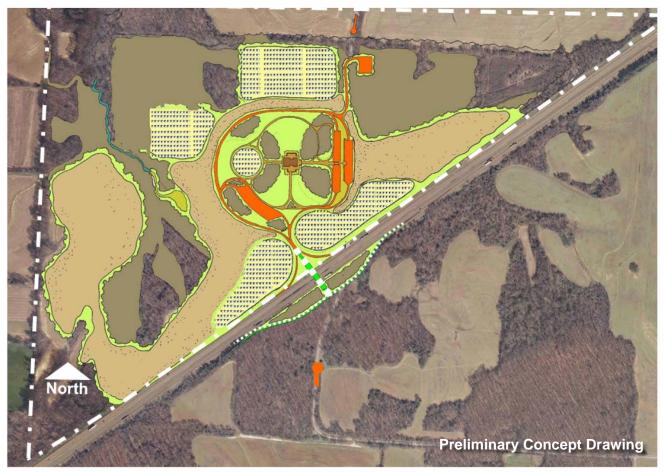
- Local road and bridge to be removed
- Improved sight lines to education and welcome center







# **Education and Welcome Center Description: Early Concept of Site Plan**



#### **Key Site Features**

- 20+ acres solar panels
- Site designed to maximize solar panel viewing
- Interpretive areas included outside of building
- Restored woodlands
- Picnic areas and pathways
- Closed roadway system
- Car parking
- Bus/RV parking





# Question & Answer Session





# Public Comment Session





### **To Submit Written Comments**

- Please leave written comments at the registration table, or
- Send written comments to:

#### Ryan Gooch

Department of Economic & Community Development 312 Rosa L. Parks Avenue, 10th Floor Nashville, TN 37243 1-800-342-1340

Please comment before December 4, 2009.

ecd.energypolicy@tn.gov



